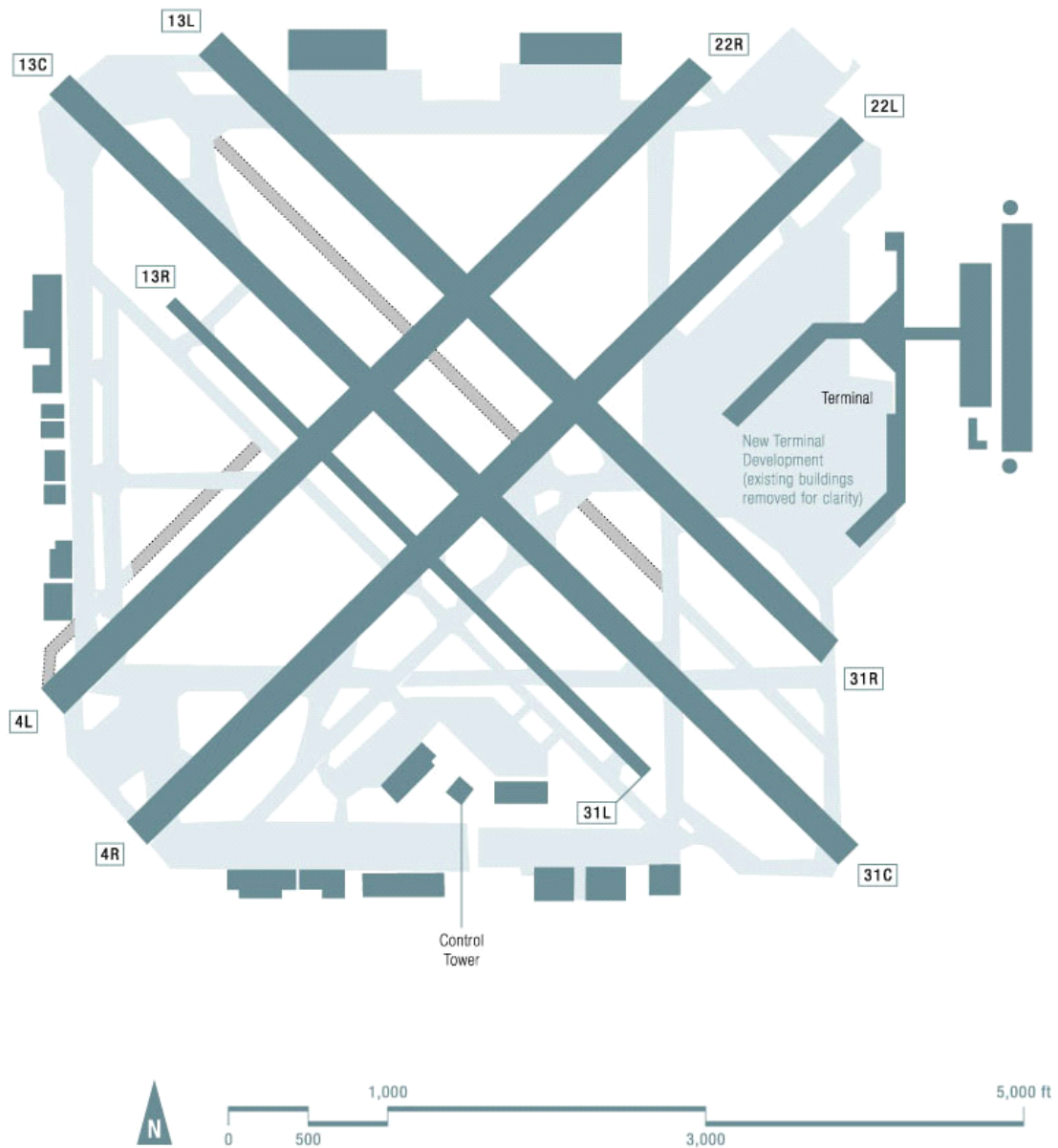


CHICAGO – Chicago Midway International (MDW)



CHICAGO – Chicago Midway International Airport (MDW)

Benchmark Results

- The capacity benchmark for Chicago Midway International Airport today is 64-65 flights per hour (arrivals and departures) in Optimum weather. The benchmark rate remains the same in Marginal conditions.
- The benchmark rate decreases to 61-64 flights per hour in IFR conditions.
- According to ATC facility reports, the most common configuration used at MDW under Optimum and Marginal scenarios is arrivals on Runway 31C with some landings of “Small” category aircraft on Runways 31R and 31L.
- Planned technological and procedural improvements at MDW would increase the benchmark capacity in Optimum and Marginal conditions. A redesign of the Chicago airspace was assumed to allow use of visual separations between arrivals. The use of CEFR in Marginal conditions would allow visual separations by suitably equipped aircraft. The increase during peak arrival periods would be greater than the increase in the benchmark rate.
- These improvements would not increase the benchmark rate under IFR conditions.
- The following charts compare actual hourly traffic with the calculated capacity curves for MDW. A few points lie outside the capacity curves. There are many possible reasons why this may occur without affecting operational safety. Higher throughputs may be possible through more efficient sequencing of aircraft, or when pilot and controller performance is better than average. Also, actual weather conditions during the hour may have been better than the hourly readings in the database, allowing the use of different ATC procedures.

These values were calculated for the Capacity Benchmarking task and should not be used for other purposes, particularly if more detailed analyses have been performed for the airport or for the individual programs.

The list of Planned Improvements and their expected effects on capacity does not imply FAA commitment to or approval of any item on the list.

CHICAGO – Chicago Midway International Airport (MDW)

<i>Weather</i>	<i>Scenario</i>	<i>Configuration</i>	<i>Procedures</i>	<i>Benchmark Rate (per hour)</i>
Optimum Rate Ceiling and visibility above minima for visual approaches (1900 ft ceiling and 3 mi visibility) <i>Occurrence: 84%</i>	Today	Arrivals on Runways 31C, landings of "small" category aircraft on 31R/L, Departures on 31C and 22L <i>Frequency of Use: 54% in optimum conditions</i>	Instrument approaches, visual separation	64-65
	New Runway	N/A		N/A
	Planned improvements (2013)	Same	Visual approaches, visual separation	71
Marginal Rate Below visual approach minima but better than instrument conditions <i>Occurrence: 7%</i>	Today	Arrivals on Runways 31C, landings of "small" category aircraft on 31R/L, Departures on 31C and 22L <i>Frequency of Use: 57% in optimum conditions</i>	Instrument approaches, visual separation	64-65
	New Runway	N/A		N/A
	Planned improvements (2013)	Same	Visual approaches, visual separation	71
IFR Rate Instrument conditions (ceiling < 1000 ft or visibility < 3.0 miles) <i>Occurrence: 8%</i>	Today	Arrivals on Runway 31C, Departures on 31C and 22L <i>Frequency of Use: 50% in IFR conditions</i>	Instrument approaches, radar separation	61-64
	New Runway	N/A		N/A
	Planned improvements (2013)	Same		61

NOTE: Data on frequency of occurrence of weather and runway configuration usage is based on FAA ASPM data for January 2000 to July 2002 (excluding 11-14 September 2001), 7 AM to 10 PM local time.

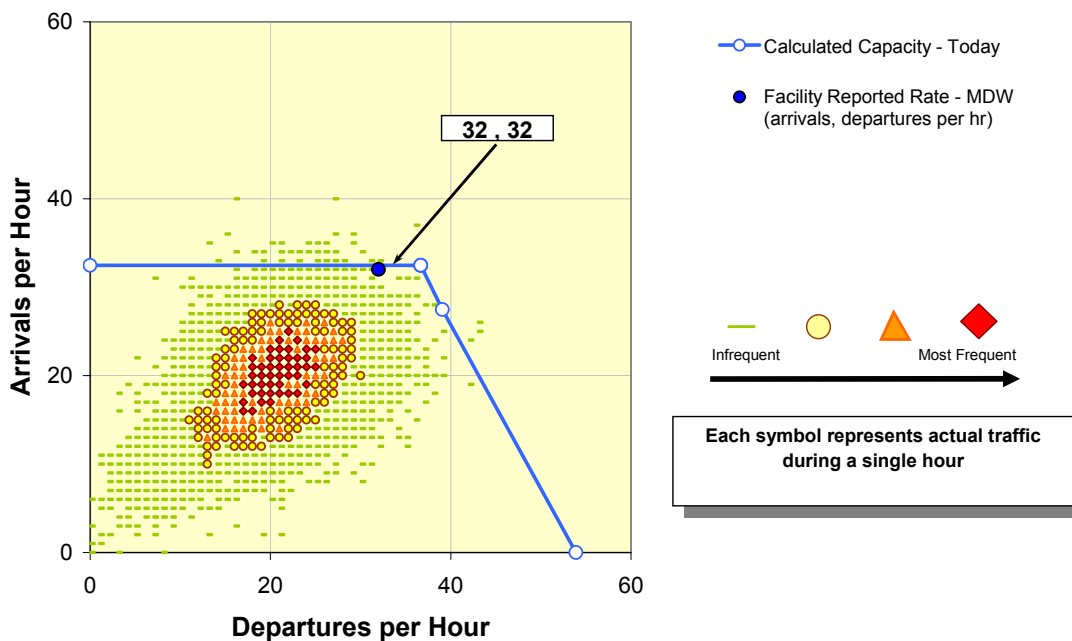
Planned Improvements at MDW include:

- CEFR, for reduced in-trail separations between arrivals in Marginal conditions.
- Airspace redesign. It is assumed that this redesign will allow reduced separations in Optimum and Marginal conditions.

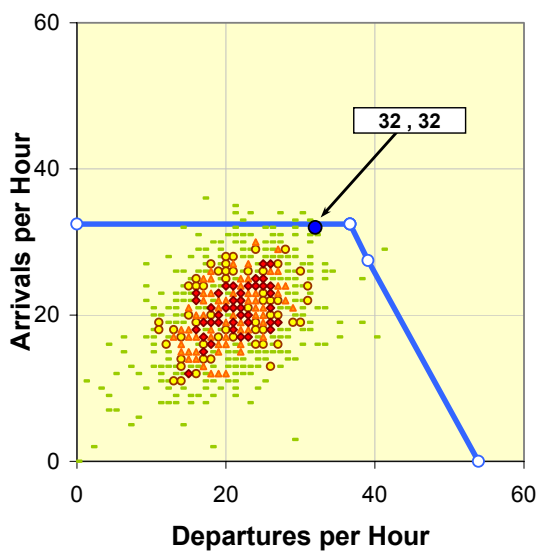
Additional information on these improvements may be found in the Introduction and Overview of this report, under "Assumptions."

Calculated Capacity (Today) and Actual Throughput

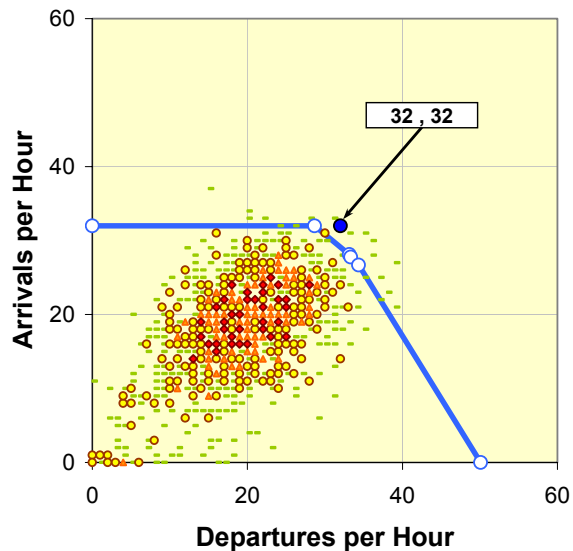
Optimum Rate



Marginal Rate



IFR Rate



Hourly traffic data was obtained from the FAA ASPM database for January 2000 to July 2002 (excluding 11-14 September 2001), 7 AM to 10 PM local time. Facility reported rates were reviewed by ATC personnel at MDW.